# Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)		
DIRECTV Enterprises, LLC	)	File Nos	SAT-LOA-20060908-00100
Application for Authorization to Launch and	)	THE INOS.	SAT-AMD-20080114-00014
Operate DIRECTV RB-2, a Satellite in the	)		SAT-AMD-20080321-00077
17/24 GHz Broadcasting Satellite Service at the 102.825° W.L. Orbital Location	)	Call Cian	92712
at the 102.823 W.L. Orbital Location	)	Call Sign:	52/12
Spectrum Five LLC	)	File No.	SAT-LOI-20081119-00217
	)		SAT-AMD-20120314-00044
Petition for Declaratory Ruling to Serve the U.S.	)		
Market from the 103.15° W.L. Orbital Location in	)	Call Sign:	S2778
the 17/24 GHz Broadcasting Satellite Service	)		

#### ORDER ON RECONSIDERATION AND DECLARATORY RULING

Adopted: May 31, 2012 Released: May 31, 2012

By the Chief, International Bureau:

INTRODUCTION

1. With this Order, we deny Spectrum Five LLC's (Spectrum Five) Petition for Reconsideration of the Order granting DIRECTV Enterprises, LLC (DIRECTV) authority to construct, launch and operate a 17/24 GHz Broadcasting-Satellite Service (BSS) space station at the 102.825° W.L. orbital location. Contrary to Spectrum Five's assertion, the *DIRECTV RB-2 Order* does not authorize an over-powered space station. We also find that Spectrum Five has not raised any new arguments that warrant reconsidering the grant.

2. In addition, we deny Spectrum Five's request to access the U.S. market from a Netherlands-authorized space station at the 103.15° W.L. orbital location.<sup>2</sup> We do so because Spectrum Five's proposed space station cannot provide service in the United States without causing harmful interference to the previously licensed DIRECTV RB-2 space station located less than one-half degree away.

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I.

<sup>&</sup>lt;sup>1</sup> DIRECTV Enterprises, LLC Application for Authorization to Launch and Operate DIRECTV RB-2, a Satellite in the 17/24 GHz Broadcasting Satellite Service at the 102.825° W.L. Orbital Location, *Order and Authorization*, 24 FCC Rcd 9393 (Int'l Bur. 2009) (*DIRECTV RB-2 Order*). Petition for Reconsideration of Spectrum Five LLC (filed Aug. 27, 2009) (Spectrum Five Petition for Reconsideration).

<sup>&</sup>lt;sup>2</sup> Spectrum Five LLC Petition for Declaratory Ruling to Serve the U.S. Market from the 103.15° W.L. Orbital Location in the 17/24 Broadcasting Satellite Service Band, IBFS File No. SAT-LOI-20081119-00217, Call Sign: S2778 (Spectrum Five Market Access Request).

### II. BACKGROUND

- 3. DIRECTV filed its application for the DIRECTV RB-2 space station at the 103° W.L. orbital location in 2006,<sup>3</sup> before the Commission adopted service rules for the 17/24 GHz BSS.<sup>4</sup> In 2007, the Commission adopted a first-come, first-served licensing framework for processing 17/24 GHz BSS applications and market access requests.<sup>5</sup> In addition, the Commission adopted a framework in which 17/24 GHz BSS space stations would operate at orbital locations spaced at four-degree intervals, as set forth in Appendix F to the Order (Appendix F locations). The Commission also allowed operators the flexibility to operate at orbital locations offset<sup>6</sup> from Appendix F locations if the offset operations do not increase interference to satellites at adjacent Appendix F locations (offsetting a space station from one Appendix F location will bring the satellite that much closer to another Appendix F location).<sup>7</sup> In the 17/24 GHz BSS Report and Order, the Commission also imposed a freeze on filing new applications for the 17/24 GHz BSS.<sup>8</sup> The Commission limited the freeze to applications for new U.S.-licensed space stations and to new requests for market access by non-U.S.-licensed space stations. The freeze expressly excluded 17/24 GHz BSS applications pending as of May 4, 2007, the date on which the 17/24 GHz BSS Report and Order was adopted. The Commission indicated that the freeze would continue from that date until a date and time to be designated by the International Bureau (the Bureau).<sup>9</sup>
- 4. The Commission directed the Bureau to establish procedures by which applicants could amend pending applications to conform to the new rules. Pursuant to these procedures, DIRECTV filed a conforming amendment, seeking to operate DIRECTV RB-2 at the 102.825° W.L. orbital location, which is offset 0.175 degree from the 103° W.L. Appendix F orbital location. On July 2, 2008, the Bureau placed DIRECTV's application on public notice as acceptable for filing. Spectrum Five did not comment on DIRECTV's application during the 30-day public notice period.

<sup>&</sup>lt;sup>3</sup> IBFS File No. SAT-LOA-20060908-00100 (filed Sept. 8, 2006).

<sup>&</sup>lt;sup>4</sup> Establishment of Policies and Service Rules for the Broadcasting-Satellite Service at the 17.3-17.7 GHz Frequency Band and at the 17.7-17.8 GHz Frequency Band Internationally, and at the 24.75-25.25 GHz Frequency Band for Fixed Satellite Services Providing Feeder Links to the Broadcasting-Satellite Service and for the Satellite Services Operating Bi-directionally in the 17.3-17.8 GHz Frequency Band, *Report and Order and Further Notice of Proposed Rulemaking*, IB Docket No 06-123, 22 FCC Rcd 8842 (2007) (17/24 GHz BSS Report and Order); Order on Reconsideration, 22 FCC Rcd 17951 (2007) (17/24 GHz BSS Order on Reconsideration).

<sup>&</sup>lt;sup>5</sup> 17/24 GHz BSS Report and Order, 22 FCC Rcd at 8847, ¶ 8. Under this framework, we consider applications in the order in which they are filed and will grant an application if the applicant meets basic qualification standards set forth in Section 25.156(a), and if the proposed space station will not cause harmful interference to a previously licensed space station. 47 C.F.R. §§ 25.156(a), 25.158(b)(3)(ii).

<sup>&</sup>lt;sup>6</sup> In this service, offset means that the satellite is not operating at the precise Appendix F location. For example, DIRECTV proposed to operate its space station at  $102.825^{\circ}$  W.L. -i.e., offset by .175 degrees from the  $103.0^{\circ}$  W.L. Appendix F location.

<sup>&</sup>lt;sup>7</sup> 17/24 GHz BSS Order on Reconsideration, 22 FCC Rcd at 17960, ¶ 22.

<sup>&</sup>lt;sup>8</sup> 17/24 GHz BSS Report and Order, 22 FCC Rcd at 8902, ¶ 147, 8920, ¶¶ 204-205.

<sup>&</sup>lt;sup>9</sup> *Id.* at 8902, ¶ 147.

<sup>&</sup>lt;sup>10</sup> See International Bureau Establishes Deadline for Amendments to Pending 17/24 GHz BSS Applications, *Public Notice*, Report No. SPB-223, DA 07-4895 (Dec. 5, 2007).

<sup>&</sup>lt;sup>11</sup> Policy Branch Information, Satellite Space Applications Accepted for Filing, *Public Notice*, Report No. SAT-00535 (rel. July 2, 2008); Policy Branch Information, Satellite Space Applications Accepted for Filing, *Public Notice*, Report No. SAT-00537 (rel. July 11, 2008) (corrections).

<sup>&</sup>lt;sup>12</sup> Ciel Satellite Limited Partnership (Ciel), SES Americom Inc. (SES Americom) and Pegasus Development DBS Corporation (Pegasus) filed comments. Comments filed by Ciel and SES Americom related to international

- 5. The Bureau lifted the freeze on new 17/24 GHz BSS applications on September 10, 2008. <sup>13</sup> On November 19, 2008, Spectrum Five filed a request to serve the U.S. market through a 17/24 GHz BSS Netherlands-authorized space station at the 103.15° W.L. orbital location. <sup>14</sup> As was the case with DIRECTV's application, Spectrum Five's proposed orbital location was offset from the 103° W.L. Appendix F location. Spectrum Five's November 2008 Market Access Request was second-in-line to the DIRECTV RB-2 application.
- 6. The first time Spectrum Five raised concerns about DIRECTV's application for the DIRECTV RB-2 space station was in Spectrum Five's November 2008 Market Access Request. Consistent with Section 25.154 of the Commission's rules, the Bureau placed Spectrum Five's comments in the record for the DIRECTV RB-2 application, and provided both Spectrum Five and DIRECTV an opportunity to file further pleadings, which they did. In both proceedings, Spectrum Five argued that the Commission should dismiss or deny DIRECTV's application, claiming that the application was substantially incomplete, and therefore unacceptable for filing. Spectrum Five also argued that DIRECTV's proposed power flux-density (PFD) exceeded the limits in the Commission's rules. Spectrum Five asserted that once we dismiss or deny DIRECTV's application, we would be in a position to grant Spectrum Five's second-in-line Market Access Request.

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coordination responsibilities. Pegasus filed comments with respect to each of the 17/24 GHz BSS applications pending at that time, seeking clarification of Sections 25.158(c) (prohibition on transfer of place in application queue) and 25.165 (bond requirement) of the Commission's rules. 47 C.F.R. §§ 25.158(c), 25.165. Ciel's and SES Americom's comments were addressed in the *DIRECTV RB-2 Order*, 24 FCC Rcd at 9405, ¶ 32. The issues raised by Pegasus were addressed in Application of DIRECTV Enterprises, LLC to Amend its Pending Application for a 17/24 GHz BSS Authorization at the 107° W.L. Orbital Location, *Memorandum Opinion and Order*, 24 FCC Rcd 9408 (Int'l Bur. 2009).

<sup>&</sup>lt;sup>13</sup> International Bureau Lifts Freeze on Filing of 17/24 GHz BSS Applications, Report No. SPB-228, *Public Notice*, DA 08-1887 (rel. Aug. 11, 2008); International Bureau Reschedules Date that Freeze on Filing of 17/24 GHz BSS Applications is Lifted, *Public Notice*, DA 08-1900 (rel. Aug. 13, 2008).

<sup>&</sup>lt;sup>14</sup> Spectrum Five Market Access Request. Section 25.137(c) of the Commission's rules provides that parties seeking to use non-U.S.-licensed GSO-like space stations to serve the United States can file applications that will be processed under our first-come, first-served framework, pursuant to Section 25.158 of the Commission's rules. 47 C.F.R. §§ 25.137(c), 25.158.

<sup>&</sup>lt;sup>15</sup> The *DIRECTV RB-2 Order* contains a detailed history of DIRECTV's application, Spectrum Five Market Access Request, and each filing made by the parties. *DIRECTV RB-2 Order*, 24 FCC Rcd at 9394-96, ¶¶ 4-6.

<sup>&</sup>lt;sup>16</sup> 47 C.F.R. § 25.154 (oppositions to applications and other pleadings). As is described in the *DIRECTV RB-2 Order*, the International Bureau initially issued a declaratory ruling dismissing the DIRECTV application as defective. DIRECTV Enterprises, LLC Application for 17/24 GHz BSS Satellite at 102.825° W.L., *Declaratory Ruling*, DA 09-87, 24 FCC Rcd 423 (Int'l Bur. 2009). Several weeks later, on its own motion, the Bureau set aside the declaratory ruling in order to develop a more detailed record and to consider DIRECTV's application more fully. DIRECTV Enterprises, LLC Application for 17/24 GHz BSS Satellite at 102.825° W.L., *Order*, 24 FCC Rcd 1343, ¶ 3 n.2 (Int'l Bur. 2009) (*Set Aside Order*) (treating Spectrum Five's comments as an informal objection, placing them in the record pursuant to Section 25.154(b), and permitting the filing of further comments by DIRECTV and Spectrum Five, pursuant to Sections 25.154(c) and (d)).

<sup>&</sup>lt;sup>17</sup> Spectrum Five Market Access Request, Legal Narrative at 3-11. *See also ex parte* filings by Spectrum Five cited in the *DIRECTV RB-2 Order*, 24 FCC Rcd at 9395, ¶ 5 n.13.

<sup>&</sup>lt;sup>18</sup> Spectrum Five Market Access Request, Legal Narrative at 4. Because the proposed DIRECTV and Spectrum Five satellites would be located less than one-half degree apart at their requested orbital locations, they cannot operate without causing harmful interference into each other's system.

- 7. The Bureau authorized DIRECTV to construct, launch and operate the proposed space station at the 102.825° W.L. offset orbital location at reduced power in July 2009. In the *DIRECTV RB-2 Order*, the Bureau discussed the PFD limits for the 17/24 GHz BSS, as well as the requirement to demonstrate compliance with those limits. The Bureau found that, contrary to Spectrum Five's assertions, DIRECTV's application was substantially complete, and that the proposed PFD met the limits in Section 25.208(w) of the Commission's rules. In addition, to ensure that DIRECTV's offset operations do not cause any additional interference to a satellite operating at the adjacent Appendix F location, the Bureau imposed a license condition limiting DIRECTV RB-2's operating power to between 0.47 dB and 0.51 dB less than full power, the precise amount depending on the surface location on Earth of a given measurement point. In the construction of the surface location on Earth of a given measurement point.
- 8. Before us now is Spectrum Five's August 27, 2009 petition for reconsideration of the *DIRECTV RB-2 Order*. In its petition for reconsideration, Spectrum Five argues that the Bureau inappropriately licensed DIRECTV to operate an over-powered space station.<sup>23</sup> Spectrum Five also claims that DIRECTV improperly used inputs from its link budget calculations in its PFD demonstration,<sup>24</sup> and the Bureau should have therefore dismissed DIRECTV's application as incomplete.<sup>25</sup> In addition, Spectrum Five claims that the grant gives DIRECTV an unfair competitive advantage over other licensees by allowing it to operate at power higher than the limits in the Commission's rules.<sup>26</sup>
- 9. DIRECTV opposes the Petition for Reconsideration, arguing that the Bureau's decision was correct.<sup>27</sup> DIRECTV asserts that it properly included atmospheric attenuation in its PFD demonstration. DIRECTV argues that since there is no established method for determining which types of atmospheric attenuation should be included in clear sky PFD calculations, the Bureau correctly concluded that DIRECTV's PFD demonstration met the Commission's rules. DIRECTV also argues that there was no basis to dismiss or deny its application, even if Spectrum Five were correct, because the amount of excess power alleged is minor, and could be addressed by a license condition. In reply comments, Spectrum Five further argues that the use of link budget inputs is inappropriate in the PFD demonstration, and that use of those inputs resulted in the Bureau licensing an over-powered satellite.<sup>28</sup> Spectrum Five also claims that the Bureau relied on an incorrect PFD limit in analyzing DIRECTV's demonstration because it failed to use a lower PFD limit than the limit contained in Section 25.208(w) of the Commission's rules.<sup>29</sup> According to Spectrum Five, the Bureau should have adjusted the limit to reflect DIRECTV's proposed offset orbital location.<sup>30</sup>

<sup>&</sup>lt;sup>19</sup> DIRECTV RB-2 Order, 24 FCC Rcd 9393.

 $<sup>^{20}</sup>$  *Id.* at 9397-98, ¶¶ 10-12.

<sup>&</sup>lt;sup>21</sup> *Id.* at 9403-05, ¶¶ 26-31.

<sup>&</sup>lt;sup>22</sup> DIRECTV RB-2 Order, 24 FCC Rcd. at 9404-05, ¶ 31.

<sup>&</sup>lt;sup>23</sup> Spectrum Five Petition for Reconsideration at 3.

<sup>&</sup>lt;sup>24</sup> *Id.* at 5-8.

<sup>&</sup>lt;sup>25</sup> *Id.* at 16-23.

<sup>&</sup>lt;sup>26</sup> *Id.* at 11.

<sup>&</sup>lt;sup>27</sup> DIRECTV Enterprises, LLC Opposition to Petition for Reconsideration (filed Sept. 10, 2009).

<sup>&</sup>lt;sup>28</sup> Spectrum Five LLC's Reply in Support of Petition for Reconsideration at 6 (filed Sept. 17, 2009).

<sup>&</sup>lt;sup>29</sup> 47 C.F.R. § 25.208(w).

<sup>&</sup>lt;sup>30</sup> Spectrum Five Reply at 9. On December 27, 2011, Spectrum Five filed a motion for leave to file a supplement, and a proposed supplement to the petition for reconsideration. Spectrum Five LLC Motion for Leave to File

10. The Bureau placed Spectrum Five's Market Access Request on public notice as accepted for filing on October 23, 2009.<sup>31</sup> DIRECTV filed a petition to deny the request, arguing that Spectrum Five's proposed operations would cause interference to its previously licensed DIRECTV RB-2 space station.<sup>32</sup> Spectrum Five opposed the petition to deny.<sup>33</sup>

## III. DISCUSSION

# A. Spectrum Five Market Access Request

- 11. Pursuant to the first-come, first-served licensing framework, the Commission places applications for new satellites at new orbital locations and market access requests for non-U.S.-licensed satellites at new orbital locations in a processing "queue," and considers them in the order in which they are filed.<sup>34</sup> If the proposed satellite will not cause harmful interference to a licensed satellite, the Commission will grant the application.<sup>35</sup> We granted DIRECTV's first-in-line application for a 17/24 GHz BSS space station at the nominal 103° W.L. orbital location.
- 12. Spectrum Five does not dispute that the proposed operations of its space station at the nominal 103° W.L. orbital location would cause harmful interference to DIRECTV's previously authorized system. Instead, Spectrum Five argues that it would be premature for the Bureau to dismiss its Market Access Request in light of its petition for reconsideration of the *DIRECTV RB-2 Order*. To the extent that Spectrum Five argues that we should refrain from acting on its request until all potential challenges to the grant of the *DIRECTV RB-2 Order* are exhausted, we do not agree. The Commission has stated that rather than keeping subsequently filed applications on file, once we issue a license to the applicant that was first in the queue, we "deny applications that conflict with previously granted"

Supplement (filed Dec. 27, 2011); Spectrum Five LLC Supplement to Petition for Reconsideration (filed Dec. 27, 2011). DIRECTV filed a letter in response, arguing that the points raised by Spectrum Five were frivolous. Letter from William M. Wiltshire, Counsel for DIRECTV Enterprises, LLC, to Marlene H. Dortch, Secretary, Federal Communications Commission (filed Jan. 6, 2012). To enable us to consider all arguments raised by the parties, we grant Spectrum Five's motion, and treat these pleadings as informal comments.

<sup>(...</sup>continued from previous page)

<sup>&</sup>lt;sup>31</sup> Policy Branch Information, Satellite Space Applications Accepted for Filing, *Public Notice*, Report No. SAT-00641 (rel. Oct. 23, 2009).

<sup>&</sup>lt;sup>32</sup> DIRECTV Enterprises, LLC Petition to Deny at 2 (filed Oct. 28, 2009) (DIRECTV Petition to Deny) ("The system licensed to DIRECTV and that proposed by Spectrum Five plainly cannot both operate from this slot"). DIRECTV also argues that the Bureau should have dismissed Spectrum Five's request for market access. *Id.* In light of our determination to deny Spectrum Five's Market Access Request, we need not address this argument.

<sup>&</sup>lt;sup>33</sup> Spectrum Five LLC Opposition to Petition to Deny (filed Nov. 9, 2009) (Spectrum Five Opposition). Spectrum Five acknowledged that its market access request involved the same frequency band and the same nominal location as DIRECTV's previously licensed space station. Spectrum Five Opposition at 3-4. Further, it does not allege that it can operate its proposed space station in the United States in a manner that will not cause harmful interference to DIRECTV RB-2. Ciel Satellite Limited partnership also filed comments. In light of our decision to deny the request, we need not address Ciel's comments here.

<sup>&</sup>lt;sup>34</sup> See 47 C.F.R. §§ 25.158(b), 25.137(c).

<sup>&</sup>lt;sup>35</sup> See 47 C.F.R. § 25.158(b)(3).

<sup>&</sup>lt;sup>36</sup> Spectrum Five Opposition at 5-9.

<sup>&</sup>lt;sup>37</sup> We have previously denied second-in-line applications during the pendency of review of a grant to a first-in-line application. *See* EchoStar Satellite LLC, Application for Authority to Construct, Launch, and Operate a Geostationary Satellite Using the Extended Ku-band Frequencies in the Fixed-Satellite Service at the 101° W.L. Orbital Location, *Order*, 20 FCC Rcd 12027 (Sat. Div. Int'l Bur. 2005).

applications because it is more likely to result in faster service to the public and it will not disadvantage any party that may wish to apply for that orbit location if it becomes available."<sup>38</sup> We therefore deny Spectrum Five's second-in-line market access request.

# **B.** Spectrum Five Petition for Reconsideration

13. In its Petition for Reconsideration, Spectrum Five raises the same procedural arguments it previously raised concerning the application's completeness, and whether DIRECTV appropriately used inputs from its link budgets, in particular, atmospheric attenuation, in making its PFD demonstration. The Bureau fully addressed these issues in the *DIRECTV RB-2 Order*<sup>39</sup> and we will not repeat that discussion here. <sup>40</sup> Spectrum Five's Petition for Reconsideration presents no new arguments that warrant revisiting these issues.

14. Spectrum Five now also argues that the Bureau granted DIRECTV authority to launch and operate a satellite with powers that exceed those permitted by the Commission's rules. In particular, Spectrum Five alleges that the authorized space station is over-powered by 0.44 dB. 41 However, Spectrum Five's assertion is based on an erroneous reading of the rules and the DIRECTV RB-2 Order, as we explain below. In arguing that DIRECTV RB-2's authorized power violates Commission rules, Spectrum Five conflates two Commission rules: (1) Section 25.208(w), which contains PFD limits for 17/24 GHz BSS space stations in specified regions, <sup>42</sup> and (2) Section 25.140(b)(4)(iii), which requires 17/24 GHz applicants proposing space stations at offset locations to demonstrate that their operations will not cause more interference to any current or future 17/24 GHz BSS space station that is in compliance with Part 25 than would be caused if the offset operations were located at the precise Appendix F orbital location. 43 In conflating the two rules, Spectrum Five incorrectly argues that applicants proposing to operate at offset locations must demonstrate they meet PFD limits lower than the ones set out in Section 25.208(w). Spectrum Five also overlooks DIRECTV's interference analysis, which demonstrates that DIRECTV RB-2 can operate compatibly with a space station closer than four degrees away by reducing power, and the condition in the DIRECTV RB-2 Order requiring DIRECTV to operate DIRECTV RB-2 with maximum PFD limits well below those in Section 25.208(w).

<sup>&</sup>lt;sup>38</sup>See Amendment of the Commission's Space Station Licensing Rules and Policies, *First Report and Order*, 18 FCC Rcd 10760, 10806, ¶ 113 (2003).

<sup>&</sup>lt;sup>39</sup> *DIRECTV RB-2 Order*, 24 FCC Rcd. at 9402-05, ¶¶ 19-25.

<sup>&</sup>lt;sup>40</sup> *Id.* at 9401-05, ¶¶ 7-31.

<sup>&</sup>lt;sup>41</sup> Spectrum Five Petition for Reconsideration at 7 n.9.

<sup>&</sup>lt;sup>42</sup> 47 C.F.R. § 25.208(w) ("The power flux density at the Earth's surface produced by emissions from a 17/24 GHz BSS space station operating in the 17.3-17.7 GHz band for all conditions, including clear sky, and for all methods of modulation shall not exceed the regional power flux density levels defined below. (1) In the region of the contiguous United States, located south of 38° North Latitude and east of 100 West Longitude: –115 dBW/m 2 /MHz. (2) In the region of the contiguous United States, located north of 38° North Latitude and east of 100° West Longitude: –118 dBW/m 2 /MHz. (3) In the region of the contiguous United States, located west of 100 West Longitude: –121 dBW/m 2 /MHz. (4) For all regions outside of the contiguous United States including Alaska and Hawaii: –115 dBW/m 2 /MHz.").

<sup>&</sup>lt;sup>43</sup> 25 C.F.R. § 25.140(b)(4)(iii) ("In cases where there is no previously licensed or proposed 17/24 GHz BSS space station to be located within four degrees of the applicant's proposed space station, and the applicant does not seek to operate pursuant to § 25.262(b) of this part, the applicant must provide an interference analysis of the kind described in paragraph (b)(2) of this section, except that the applicant must demonstrate that its proposed operations will not cause more interference to any current or future 17/24 GHz BSS satellite networks operating in compliance with the technical requirements of this part, than if the applicant were located at the precise appendix F orbital location from which it seeks to offset.")

15. Section 25.114(d)(15)(i) of the Commission's rules<sup>44</sup> requires each applicant proposing to operate a 17/24 GHz BSS space station to provide in its application a demonstration that its proposed space station will comply with the PFD limits in Section 25.208(w) of the Commission's rules.<sup>45</sup> There is no provision in Section 25.208(w) for lower PFD limits when an offset orbital location is proposed, or for lowering the PFD limits in that rule under any other circumstance. To the contrary, the regional PFD limits set forth in Section 25.208(w) are fixed limits resulting from operations under all conditions.<sup>46</sup> In the *DIRECTV RB-2 Order*, the Bureau correctly found -- based upon the technical information provided in DIRECTV's application -- that DIRECTV RB-2 complies with the PFD limits in Section 25.208(w). Indeed, nothing in Spectrum Five's Petition questions the conclusion that DIRECTV meets the fixed PFD limits in the rule.

16. Having found that DIRECTV RB-2 meets the PFD limits in Section 25.208(w), the Bureau next considered whether the proposed space station was capable of operating with an adjacent 17/24 GHz satellite less than four degrees away. In this regard, the Bureau noted that DIRECTV had provided an interference analysis pursuant to Section 25.140(b)(4)(iii) of the Commission's rules, in which DIRECTV calculated that its proposed offset operations would create the potential for up to 0.5 dB more interference to co-frequency adjacent space stations, and proposed to reduce its power to result in lower PFD. The Bureau then used a formula that it had applied in prior 17/24 GHz BSS grants at offset locations to calculate the reduction in power necessary for DIRECTV RB-2 to operate compatibly with adjacent satellites. The Bureau found that DIRECTV RB-2 would need to operate from 0.47 dB to 0.51 dB less than the fixed upper PFD limits specified in Section 25.208(w), depending on the location on the Earth's surface from which the angles between the orbital locations are measured. As it had with other authorizations for offset 17/24 GHz space stations, the Bureau conditioned DIRECTV's license to require the DIRECTV RB-2 space station to limit PFD to these lower levels. Consequently, the Bureau did not, contrary to Spectrum Five's assertion, authorize a space station with power levels exceeding those in the Commission's rules or that would cause additional interference to adjacent satellites.

17. In a supplement filed in December 2011, Spectrum Five notes that in July 2011 DIRECTV filed an application to modify DIRECTV RB-2's maximum Equivalent Isotropically Radiated Power from 63.0 dBW to 58.0 dBW, and did not include atmospheric attenuation in the PFD demonstration supporting the application. Spectrum Five states that this demonstrates that DIRECTV's original application had excessive power. We do not agree. We frequently receive applications to modify the operational parameters of satellites as the satellites are being built. DIRECTV's decision to lower the power in an authorization that was already conditioned to require reduced power has no relevance to whether the power levels in the initial authorization exceeded our rules. DIRECTV's choice to omit atmospheric attenuation in the PFD demonstration in its modification request is equally irrelevant. As we explained above, the power levels specified in a condition in the *DIRECTV RB-2 Order* authorization

<sup>&</sup>lt;sup>44</sup> 47 C.F.R. § 25.114(d)(15)(i).

<sup>&</sup>lt;sup>45</sup> 47 C.F.R. § 25.208(w).

<sup>&</sup>lt;sup>46</sup> To the extent DIRECTV suggests in its opposition to Spectrum Five's Petition that it may have proposed some "minor" excess power in its application for DIRECTV RB-2, we do not agree. The Bureau properly found in the *DIRECTV RB-2 Order* that the PFD levels DIRECTV proposed met the PFD limits in Section 25.208(w).

<sup>&</sup>lt;sup>47</sup> DIRECTV Conforming Amendment, IBFS File No. SAT-AMD-20080114-00014 at 12-13 and n. 11 (filed Jan. 14, 2008). *See* 25 C.F.R. § 25.140(b)(4)(iii).

<sup>&</sup>lt;sup>48</sup> See Intelsat North America LLC, Order and Authorization, 24 FCC Rcd 7058, 7062-63, ¶ 11 and 7067, ¶ 21 (Sat. Div. Int'l Bur. 2009).

<sup>&</sup>lt;sup>49</sup> *DIRECTV RB-2 Order*, 24 FCC Rcd at 9403-05, ¶¶ 26-31.

<sup>&</sup>lt;sup>50</sup> *Id.* at 9406, ¶ 34.

fully comply with the Commission's rules and operating at those power levels would not have caused interference to adjacent satellites.

### IV. CONCLUSION

18. For the reasons stated above, we deny Spectrum Five LLC's Petition for Reconsideration of the *DIRECTV RB-2 Order* granting DIRECTV authority to construct, launch and operate a 17/24 GHz BSS space station at the 102.825° W.L. orbital location. At the same time, we also deny Spectrum Five's request to access the U.S. market from a Netherlands-authorized 17/24 GHz BSS space station at the 103.15° W.L. orbital location.

## V. ORDERING CLAUSES

- 19. Accordingly, IT IS ORDERED, pursuant to Section 25.158(b)(3)(ii) of the Commission's Rules,<sup>51</sup> that the Petition for Declaratory Ruling filed by Spectrum Five LLC, IBFS File Nos. SAT-LOI-20081119-00217, SAT-AMD-20120314-00044, Call Sign S2778, IS DENIED.
- 20. IT IS FURTHER ORDERED that the Petition to Deny filed by DIRECTV Enterprises, LLC against the Spectrum Five LLC Petition for Declaratory Ruling IS GRANTED.
- 21. IT IS FURTHER ORDERED that the Motion for Leave to File Supplement filed by Spectrum Five LLC IS GRANTED to the extent indicated above.
- 22. IT IS FURTHER ORDERED that the Petition for Reconsideration of DIRECTV Enterprises, LLC Application for Authorization to Launch and Operate DIRECTV RB-2, a Satellite in the 17/24 GHz Broadcasting Satellite Service at the 102.825° W.L. Orbital Location, *Order and Authorization*, 24 FCC Rcd 9393 (Int'l Bur. 2009), filed by Spectrum Five LLC, IS DENIED.
- 23. This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately.

FEDERAL COMMUNICATIONS COMMISSION

Mindel De La Torre Chief International Bureau

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<sup>&</sup>lt;sup>51</sup> 47 C.F.R. § 25.158(b)(3)(ii).